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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 27

Application Number: 09/460223  
Filing Date: Dec. 13, 1999  
Appellant(s): Miyagawa et al

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James Ledbetter  
For Appellant

Supplemental EXAMINER'S ANSWER

This is in response to the appeal brief filed Jan. 15, 2003 and  
the remand by the Board of Appeals dated January 05, 2004.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

Appellant's brief includes a statement that claims 26, and 28-35 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) ClaimsAppealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

No prior art is relied upon by the examiner in the rejection of the claims under appeal.

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 26, and 28-35 are rejected under 35 U.S.C. 251. This rejection is set forth in prior Office Action, Paper No. 15.

**(11) Response to Argument**

Appellant's arguments have been carefully studied including and not limiting to the arguments drawn to In re Wesseler, In re Clement, In re Hester and In re Pannu.

The following remarks are written in conjunction with **Pannu v. Storz Instruments, Inc.** 258 F.3d 1366, 59 USPQ. 2d 1597 (Fed. Cir. 2001) format.

**Background:**

On August 05, 1991, Applicants filed a patent application for an optical apparatus, S/N 07/740,629 ('629 application). The '629 application discloses an optical disc recording, reproducing or erasing information signals onto/from a plurality of optical discs in which thickness of disc substrates are different. To accomplish the invention objective, the apparatus comprises the use of N converging means whose aberrations have been corrected for N ( $N > 2$ ) disc substrates having different thickness. The apparatus also discloses the use of disc discriminating means for generating the disc thickness discriminating signal and a control means for selecting one of the converging means in which the occurrence of the aberration due to the disc substrate is smallest based on the discriminating signal.

Independent claim 1 of the '629 application as originally filed reads as follows:  
An optical disc apparatus for recording, reproducing, or erasing an information signal by converging a light flux onto/from a recording layer through a transparent disc substrate, comprising:

N converging means whose aberrations have respectively been corrected for said N ( $N > 2$ ) disc substrates having different thickness;  
disc discriminating means for discriminating the thickness of the disc substrate of a loaded optical disc and for generating a discriminating signal corresponding to the result of the discrimination; and  
control means for selecting the converging means in which the occurrence of the aberration due to the disc substrate is smallest in accordance with the discrimination signal.

The examiner rejected claims 1 and 6 as being anticipated under 35 U. S. C. 102 (e) in view of Nishiuchi et al ( U. S Patent No. 5,097,464). The prior art reference shows each of the elements claimed in claims 1 and 6 as discussed in the Office action. Claims 1-30 were also rejected under 35 U. S. C 112, second paragraph, and the office action indicates that claims 2-5, and 7-30 were objected to as containing allowable subject matter if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. In response applicants filed an amendment cancelling claims 1, 6, 11, 16, 21 and 26 and rewriting claims 2, 4, 5, 7, 8 and 9 in independent form.

During the prosecution of the U. S Patent No. 5,235,581, applicant did not rebut the examiner's rejection of claims 1 and 6 under prior art. In order for applicant to overcome the prior art rejection, an amendment canceling the rejected claims (claims 1 and 6) and amending claims 2, 4, 5, and 7-9 was filed. While applicant placed claims 2, 4, 5 and 7-9 in independent form; each claim was not written to include each and every limitation of base claim 1 it had previously depended from. Claims were clearly amended so as to overcome both the 112- 2nd paragraph rejection and the prior art rejection. In addition, applicant argued what appears to be the patentable subject matter that defines over the prior art in claim 4; stating "control means selects one of the plurality of the light emitting means which are associated with the converging optical systems. By selecting one of the light emitting means, an aberration caused by the difference of the disc substrate thickness is minimized". Regarding claims 6 and 7 (reference to "claim 6" is deemed to be typo meant to refer to "claim 5" inasmuch as claim 6 was canceled), applicant raised the issue that "control means is defined as generating a control signal which is provided to the selecting means in accordance with the discrimination signal".

It should be noted that applicant's arguments concerning claim 4 are inconsistent with the amendment in that the arguments are drawn to "selecting"; whereas the amendment to claim 4 deleted the word "selecting" and replaced it with the word -

**allowing**—. It should also be noted that amendments to claims 2, 4, 5, 7, 8, and 9 were more substantive in nature than specifically argued in attorney remarks.

In response to the combination of amendments made to the claims, the examiner issued a Notice of Allowance and claims 2-5, 7-10, 12-15, 17-20, 22-25 and 27-30 issued as claims in U.S. Patent No. 5,235,581 ('581 patent).

For convenience, the independent claims of the '581 patent are reproduced below showing all of the changes (deletions shown by bracketing and additions shown by underlining) as made by Amendment "A", filed November 17, 1992:

**Independent claim 2 (renumbered as claim 1) of (U. S Patent No. 5,235,581):**

An optical recording/reproducing apparatus [according to claim 1, wherein said converging means are objective lenses, and said apparatus comprises] for recording, reproducing, or erasing an information signal by converging a light flux onto/from a recording layer through a transparent disc substrate, comprising:

- (a) N optical heads, N being greater than or equal to 2, each[of which has] comprising:  
light emitting means,  
[one of said ] objective lenses, whose aberrations have respectively been corrected for  
said N disc substrates having different thicknesses, each for converging the light flux which is emitted from the light emitting means onto the optical disc, and  
a plurality of photo detecting means each for detecting the reflected light from the optical disc;
- (b) N optical head moving means which are arranged below the optical disc and move N optical heads in the radial direction of the optical disc;
- (c) disc discriminating means for discriminating the thickness of the disc substrate of the loaded optical disc and for generating [the] a discrimination signal in accordance with the result of the discrimination; and
- (d) control means for selecting the optical head having the objective lens in which the occurrence of the aberration due to the disc substrate is smallest in accordance with the discrimination signal,  
[and] wherein the selected optical head records, reproduces[,] or erases the information signal onto/from the optical disc.

**Independent claim 4 (renumbered as claim 7) of (U. S Patent No. 5,235,581):**

An optical recording/reproducing apparatus [according to claim 1, wherein said converging means are objective lenses, and wherein said apparatus comprises] for recording, reproducing, or erasing an information signal by converging a light flux onto/from a recording layer through a transparent disc substrate, comprising:

- (a) an optical head having N, N being greater than or equal to 2, converging optical systems each [of which is constructed by] comprising:  
light emitting means,

[one of said] objective lenses, whose aberration have respectively been corrected for said N disc substrates having different thicknesses, each for converging the light flux which is emitted from the light emitting means onto the optical disc, and a plurality of photo detecting means each for detecting the reflected light from the optical disc;

(b) optical head moving means which is arranged below the optical disc and moves the optical head in the radial direction of the optical disc;

(c) disc discriminating means for discriminating the thickness of the disc substrate of the loaded optical disc and for generating a discrimination signal [corresponding to] in accordance with the result of the discrimination; and

(d) control means for [selecting] allowing the light emitting means [of], which belongs to the converging optical system in which the occurrence of the aberration due to the disc substrate is smallest in accordance with the discrimination signal [and for allowing said light emitting means], to emit [the] light,

[and] wherein the selected converging optical system records, reproduces[,] or erases the information signal onto/from the optical disc.

**Independent claim 5 (renumbered as claim 10) of (U. S Patent No. 5,235,581):**

An optical recording/reproducing apparatus [according to claim 1, wherein said converging means are objective lenses, and wherein said apparatus comprises] for recording, reproducing, or erasing an information signal by converging a light flux onto/from a recording layer through a transparent disc substrate, comprising:

(a) an optical head [having] including:

light emitting means,

light flux dividing means which are arranged in the light flux from the emitting means and divide the emitted light flux into N, N being greater than or equal to 2, light fluxes and deflect in different directions,

[said] N objective lenses, whose aberrations have respectively been corrected for said N disc substrates having different thickness, for respectively converging said N light fluxes onto the optical disc,

light flux selecting means for selecting one of the N light fluxes divided by the light flux dividing means [in accordance with a control signal] and for allowing said light flux to pass, and

photo detecting means for detecting the light fluxes reflected from the optical disc;

(b) optical head moving means which is arranged below the optical disc and moves the optical head in the radial direction of the optical disc;

(c) disc discriminating means for discriminating the thickness of the disc substrate of the loaded optical disc and for generating [the] a discriminating signal in accordance with the result of the discrimination; and

(d) control means for generating [the] a control signal to the light flux selecting means in accordance with the discrimination signal and for selecting the light flux which passes through the objective lens in which the occurrence of the aberration due to the disc substrate is smallest,

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[and] wherein the optical head records, reproduces[,] or erases the information signal onto/from the optical disc by the selected light flux.

**Independent claim 7 (renumbered as claim 13) of (U. S Patent No. 5,235,581):**

An optical recording/reproducing apparatus [according to claim 1, wherein said converging means is converging grating couplers formed on an optical waveguide, and wherein said apparatus comprises] for recording, reproducing, or erasing an information signal by converging a light flux onto/from a recording layer through a transparent disc substrate, comprising:

(a) an optical head [having] including:

[said] an optical waveguide formed on a substrate,

N light emitting means each for emitting a waveguide light into [the] said optical waveguide, N being greater than or equal to 2,

[said] N converging grating couplers, whose aberrations have respectively been corrected for said N disc substrates having different thicknesses, each for emitting the waveguide light supplied from said N light emitting means to the outside of the optical waveguide and for allowing the reflected light from the optical disc to enter, and

N photo detecting means each for detecting [the] reflected light and for generating [as] an information signal;

(b) optical head moving means which is arranged below the optical disc and moves the optical head in the radial direction of the optical disc;

(c) selecting means for selecting the light emitting means to be allowed to emit the light from among the N [light] emitting means [in accordance with a control signal];

(d) disc discriminating means for discriminating the thickness of the disc substrate of the loaded optical disc and for generating [the] a discrimination signal according to the result of the discrimination; and

(e) control means for generating [the] a control signal [to the selecting means] in accordance with the discrimination signal, for providing said control signal to said selecting means and for allowing the light emitting means for emitting the waveguide light into the converging grating coupler in which the occurrence of the aberration due to the disc substrate is smallest [to emit the light],

[and] wherein the optical head records, reproduces[,] or erases the information signal onto/from the optical disc by the light flux from the selected light emitting means.

**Independent claim 8 (renumbered as claim 16) of (U. S Patent No. 5,235,581):**

An optical recording/reproducing apparatus [according to claim 1, wherein said converging means is converging grating couplers formed on an optical waveguide, and wherein said apparatus comprises] for recording, reproducing, or erasing an information signal by converging a light flux onto/from a recording layer through a transparent disc substrate, comprising:

(a) an optical head [having] including:

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[said] an optical waveguide formed on a substrate, light emitting means for emitting a waveguide light into said optical waveguide, light flux dividing means for dividing the waveguide light emitted from the light emitting means into N [division] divided waveguide lights, N being greater than or equal to 2, said N converging grating couplers, whose aberrations have respectively been corrected for said N disc substrates having different thicknesses, each for emitting each of [the] said N divided waveguide lights to the outside of the optical waveguide and for allowing the reflected light from the disc to enter, and

N photo detecting means for respectively detecting [the] said reflected lights from the N converging grating couplers and for generating [as] information signals;

(b) optical head moving means which is arranged below the optical disc and moves the optical head in the radial direction of the optical disc;

(c) output switching means for selecting and outputting one of the output signals of said N photo detecting means [in accordance with a control signal];

(d) disc discriminating means for discriminating the thickness of the disc substrate of the loaded optical disc and for generating [the] a discrimination signal in accordance with the result of the discrimination; and

(e) control means for generating [the] a control signal to the output switching means in accordance with the discrimination signal and for selecting the photo detecting means into which the waveguide light enters from the converging grating coupler in which the occurrence of the aberration due to the disc substrate is smallest [enters].

**Independent claim 9 (renumbered as claim 19) of (U. S Patent No. 5,235,581):**

An optical recording/reproducing apparatus [according to claim 1, wherein said converging means is converging grating couplers formed on an optical waveguide, and wherein said apparatus comprises] for recording, reproducing, or erasing an information signal by converging a light flux onto/from a recording layer through a transparent disc substrate, comprising:

(a) an optical head [having] including:

[said] an optical waveguide formed on a substrate,

light emitting means for emitting a waveguide light into said optical waveguide, optical path switching means which is arranged on an optical path of [the] said waveguide light and switches the propagating direction of the waveguide light in N directions in accordance with a control signal, N being greater than or equal to 2,

[said] N converging grating couplers, whose aberrations have respectively been corrected for said N disc substrates having different thicknesses, and which are respectively arranged in said N propagating directions which are switched by said optical path switching means and emit the waveguide light to the outside of the optical waveguide and allow the reflected light from the optical disc to enter, and

photo detecting means for [generating] detecting the reflected light [as] and generating an information signal;

(b) optical head moving means which is arranged below the optical disc and moves the optical head in the radial direction of the optical disc;

(c) disc discriminating means for discriminating the thickness of the disc substrate of the loaded optical disc and for generating a discriminating signal in accordance with the result of the discrimination; and

(d) control means for generating [the] a control signal to the optical path switching means in accordance with the discrimination signal and for switching the propagating direction of the waveguide light from the light emitting means to the direction of the converging grating coupler in which the occurrence of the aberration due to the disc substrate is smallest,

[and] wherein the optical head records, reproduces[,] or erases the information signal onto/from the optical disc by the light flux emitted from the selected converging grating coupler.

On December 13, 1999 appellant filed this reissue application of the '581 patent. The reissue claims 26, 28-35 have deleted subject matter that applicants previously surrendered during the prosecution of the '581 patent. Thus these claims are rejected as impermissibly recapturing previously surrendered subject matter as follows:

Claims 26, 28-35 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1448, 45 USPQ2d 1164 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

The recapture rule "prevents a patentee from regaining through reissues the subject matter that he surrendered in an effort to obtain allowance of the original claims". *In re Clement*, 131 F.3d 1448, 45 USPQ2d 1164 (Fed. Cir. 1997). Reissued claims that are broader than the original patent's claims in manner directly pertinent to the subject matter surrendered during prosecution are impermissible.(Mentor, 998 F. 2d at 996, 27 USPQ2d at 1525).

During the '581 patent prosecution, the rejected claims 1 and 6 (in addition to claims 11, 16, 21 and 26) were canceled and claims 2, 4, 5, and 7-9 were amended (see paper# 6 filed Nov. 17, 1992) to overcome the prior art rejection. The newly added limitations included for example, "N optical heads, N being greater than or equal to 2"; objective lenses "whose aberration have respectively been corrected for said N disc substrates

having different thickness"; "a plurality of" photo detecting means, "control means for allowing" and "control means for providing said control signal to said selecting means and for allowing the light emitting means for" which have now been removed from the present reissue application. This constitutes an improper recapture of the claims, see Pannu v. Storz Instruments, Inc. 258 F.3d 1366, 59 USPQ. 2d 1597 (Fed. Cir. 2001).

The broadening aspect of the reissued claims is directly related to the surrendered subject matter. The pending independent reissue claims 26, and 28 now recite "converging means comprising different numerical apertures for converging the light flux on said second layer of said disks" (claim 26 lines 11-12, claim 28 lines 14-15 and claim 35 lines 13-14) and not the more narrow language added by the amendment filed November 17, 1992: "N converging means (objective lenses) who's aberration have respectively been corrected for said N (N>2) disk substrates having different thicknesses".

Furthermore, the reissue claims 26, 28, 31, 33 and 35 are now broader in some aspects in that claims 26, 28, 31, 33 and 35 do not recite the limitations "disk discriminating means for discriminating the thickness of the disk substrate of a loaded optical disk and for generating a discrimination signal" nor recite the limitation "control means for selecting the optical head having the objective lens in which the occurrence of the aberration due to the disk substrate is smallest in accordance with the discrimination signal" as amended during the prosecution of the '581 patent application to overcome the prior art rejection.

The reissue claims recite the use of "Photo detecting means" as opposed to the use of "plurality of photo detecting means", wherein the "control means selects one of the plurality of light emitting means which are associated with the converging optical systems" as amended by applicant to overcome the prior art rejection.. Thus reissue claims are indeed broader than the subject matter surrendered during the prosecution of the '581 patent.

Independent reissue claims 26, 28, 31, 33, and 35 are all broader in scope in some aspects, but narrower in others than the claims of the '581 patent. For these types of situations, MPEP 1412.02 advises that:

"Reissue claims that are broader in certain aspects and narrower in others vis-à-vis claims canceled from the original application to obtain a patent may avoid the effect of the recapture rule if the claims are broader in a way that does not attempt to reclaim what was surrendered earlier. Mentor Corp. v. Coloplast, Inc., 998 F.2d 992, 994, 27 USPQ2d 1521, 1525 (Fed. Cir. 1993). **If the reissue claim is as broad as**

or broader in an aspect germane to a prior art rejection, but narrower in another aspect completely unrelated to the rejection, the recapture rule bars the claim; [ ] if the reissue claim is narrower in an aspect germane to [a] prior art rejection, and broader in an aspect unrelated to the rejection, the recapture rule does not bar the claim, but other rejections are possible.” Clement, 131 F.3d at 1470, 45 USPQ2d at 1165.

In order to determine if the amended subject matter is “germane to a prior art rejection”, the examiner followed the examples set forth in section 1412.02 of the MPEP. Furthermore, the appellant’s arguments made in the brief are not persuasive. The appellant’s arguments in the brief state that none of the newly added limitations provided during the prosecution of the patent “stand alone” to overcome the prior art rejection; and therefore he argues that they “cannot be considered even in combination with other elements an ‘aspect germane to the prior art rejection’.”, yet the appellant has provided no other reasons or argued any other limitations which would have deemed them to be allowable.

Appellant arguments also set forth:

“Although no expressly stated in Clement, another category (c) exists, i.e. where the reissue claim is as broad as or broader than the canceled or amended claim in an aspect germane to a prior art rejection and narrower in another aspect germane to the prior art rejection; in such case the recapture rule may not bar the claim.” and

“under In re Clement, if there is both germane narrowing and germane broadening of such combinations of features, there is no recapture bar and the present reissue claims should be allowed.”.

**As stated in appellant’s arguments above, there is no category (c) in In re Clement. Appellant has made up this category in order to support his position. Appellant’s arguments inherently admit that claims are broadened in manners that are indeed germane to the issue of patentability; and deems that this is not recapture because it is also narrowed in another aspect that is germane with respect to patentability. This interpretation of In re Clement is entirely unsubstantiated by any decision cited and in fact, is entirely contrary to the teachings provided in the discussion of the decision in In re**

**Clement discussed in MPEP 1412.02. Accordingly, Appellant's arguments are not found to be persuasive. The decisions cited and discussed in MPEP 1412.02 clearly address the handling of reissue claims which are broader in some aspects, but narrower than others; which is the situation in this particular reissue application.**

The examiner has properly applied the criteria for determining whether or not subject matter is surrendered and it is the examiner's opinion based on the required analysis that the **amendments made to the claims during the prosecution of the patent were indeed germane in overcoming the prior art rejection on the record; accordingly the broadening aspect of the claims in this reissue application therefore constitutes impermissible recapture.**

**In response to the remand from the Board of Patent Appeal and Interference (BPAI) dated Jan 05, 2004 in view of its precedential opinion, Ex Parte Eggert et al, Appeal No. 2001-0790 (bd. Pat. & Inter. May 29, 2003). The following action is taken:**

**Background:**

Applicant filed a reissue application with claims 26, and 28-37. In the reissue application, the new claims 26, 28-37 attempt to recapture subject matter surrendered in the original application. The appeal before the Board of Patent Appeals and Interference (BPAI) appeals the decision of the Examiner to reject claims 26, 28-37 under 35 USC 251 as recapture. No other issues are present in the appeal.

Reissue application 09/460,223 of the patent to Miyagawa 5,235,581 (application 07/740,629), has the following independent claims 26, 28, 31, 33 and 35. The following analysis looks into whether the reissue claims are impermissibly broadened, by removing limitations that were relied upon during prosecution to define over the applied prior art.

Broadly speaking, the patent discloses a system of writing data on optical discs using a laser system having multiple optical head writers. Because different discs can have optical layers of varying thickness, it is essential for the system to be able to recognize the thickness of the optical layer of the disc in use, and to select the optimal optical

head writer for the disc at hand. Because the system was specifically designed with multiple optical heads or one equivalent having multiple optical systems for selective writing on different kind of discs having varying optical layers, the number of the optical heads or optical systems N must be equal to or greater than 2. Consequently, the sum of the similar optical components N of the system is identical with the number of the optical heads or systems.

In the prosecution of the original application (07/740,629), the Examiner rejected independent claim 1 and as being anticipated by Nishiuchi 5097464, that disclosed an invention similar to the claimed invention, albeit with only one head. The main difference between the claimed invention and the prior art is that instead of having multiple optical heads, the prior art had a transparent plate (element 9) for corrections of the optical path length through the optical layers of different discs. The rejection listed all the limitations in the independent claim 1, and read them on elements in the Nishiuchi patent. In the reply, applicants canceled claim 1, and re-wrote dependent claims 2, 4, 5, 7, 8, 9 in independent form to incorporate the limitations of claim 1. Claim 6 and its dependent claims 16 and 26 were canceled. Arguments were made regarding (the cited claims numbers refer to patent claims numbers NOT the original application claims numbers): a) the control means selecting one of a plurality of light emitting systems for the minimization of the substrate-thickness aberration (claim 7); b) the control means generating a signal to the selecting means according to the discrimination signal (claims 10, 13 (it is believed that the reference in the response to application claims 6 and 7 is an error for application claim 5 (patent claim 10) and application claim 7 (patent claim 13)); and c) the definition of N converging grating couplers (claim 19). Although the response argued that the amendment was made to overcome a blank rejection of all the claims

under 35 US C 112, it rather addresses the limitations that, in combination with the other limitations of the independent claims, defined the claims over the applied prior art. It is also to be noted that the Examiner identified the allowable claims because they defined over the prior art, and applicants did not refute the Examiner's conclusion. Note that the above limitations were the ONLY limitations that were argued in applicant's response prior to the allowance, and those limitations were made part of all the application claims by way of the amendment that deleted all claims not having them.

In the rejection of the claims made in the reissue application, the Examiner properly rejected the reissue claims by noting that the applicant is attempting to remove said limitations, that were added in-combination to define over the applied prior art to provide the allowed claims, and, as explained above, applicant's current argument that the amendment was intended to overcome the rejection under 35 US C 112, 2<sup>a</sup> paragraph is not credible.

In the present instance, applicant argued the novelty of the following limitations:

Element X: control means selecting objective lens minimizing the aberration caused by the disc substrate.

Element Y: means for discriminating the thickness substrate (see page 9 of paper no. 6, filed 11/17/1992).

Element Z: the number of the optical heads, N1 equal or greater than 2, and the identical number N of their respective similar components. This limitation is critical in defining over the prior art, and although specifically argued by Applicant (in the original application) only with regard to application claim 9 and patent claim 19, it is inherently implied in applicant's response through the use of plural language for limitations such as "plurality of light emitting means", and "converging optical systems", i.e., the optical heads (see loc. cit.).

To overcome the prior art rejection, applicant rewrote the claims (which were ultimately allowed) to add in combination limitations X, Y, and Z, to the other limitations of the claims, i.e., limitations X, Y, and Z were made part of all the claims.

The applicant made the choice of inserting, i.e., incorporating limitations X, Y, and Z into all the claims allowed. The applicant chose not to prosecute further variations of the claims omitting limitations X, Y, and Z; rather the combination of all these limitations are present in the originally allowed claims. At the present, on reissue,

Applicant is not permitted to completely delete limitations X, Y and Z. See *Pannu v. Storz Instruments, Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001), discussed below.

*Eggert*: The decision in *Ex Parte Eggert*, Appeal No. 2001-0790 (Bd. Pat. App. & Inter., decided May 29, 2003) (precedential opinion of an expanded panel of the Board) is not applicable to the facts of this appeal. The claims on appeal omit the surrendergenerating limitations (i.e., the limitation(s) added to all claims in the original prosecution to define over the art to secure allowance of the patent). This is because the limitations of patent claim 1 (that were added in the original application), which are represented as element X, Y, and Z above, respectively, in their entirety, are essentially absent from the reissue claims 26, 28, 31, 33 and 35. Therefore, the claims impermissibly recapture what was previously surrendered.

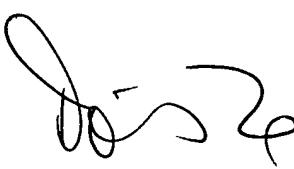
<sup>1</sup> Note that the use of N in the instant application is somewhat misleading. In the original patent, N limited the number of different types of discs having different optical layers AND the number of optical heads or similar optical components. In the instant application N limits only the number of types of discs.

In view of *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997), if a reissue claim is broader in an aspect germane to what was surrendered in response to a prior art rejection, but narrower in another aspect completely unrelated to what was surrendered, the recapture rule bars the claim. This is the understanding of how the shorthand set forth in *Clement*, 131 F.3d at 1470, 45 USPQ2d at 1165 for the broadening/narrowing scenario 3(a), is applied in light of *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998) and *Pannu v. Storz Instruments, Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001) both of which pointed out that one should look at the limitation relied upon to define the invention over the prior art, and determine if that limitation is omitted in the reissue claims. Note also the statement in *Clement* that every time the claims are narrowed by amendment, subject matter is surrendered. *Clement*, 131 F.3d at 1471, 45 USPQ2d at 1166 ("[E]very time Clement amended his claims, he intentionally omitted or abandoned the claimed subject matter.").

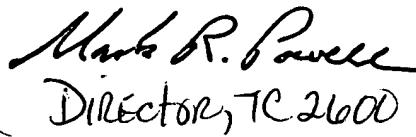
The combination of the limitations of elements X, Y and Z in claims 1, 7, 10, 13, 16, and 19 of the original patent are germane to what was surrendered in response to a prior art rejection. Therefore, the limitations of elements X, Y and Z of claims 1, 7, 10, 13, 16, and 19 were necessary in order to secure a patent. Similar to the facts in *Pannu v. Storz Instruments, Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001), the applicant has broadened the reissue claims in an aspect germane to what was surrendered, in response to the prior art rejection, and has narrowed in an area not related to the surrender. The decision in *Pannu* is on point as to the issues on appeal, because it provides an actual fact situation in which this scenario was held to be recapture. Thus, *Pannu* is on point while *Eggert* is not, and claims 26, 28, 31, 33 and 35 impermissibly recapture what was previously surrendered.

For the above reasons, it is believed that the rejections should be sustained.

  
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